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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,433	11/29/2000	Kuniyuki Kajita	L9289.00121	9782

7590 02/27/2004

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1615 L Street NW
Washington, DC 20036

EXAMINER

CHUNG, PHUNG M

ART UNIT	PAPER NUMBER.
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2133

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

3

Office Action Summary

Applicati n N .

09/701,433

Applicant(s)

KAJITA, KUNIYUKI

Examin r

Phung M. Chung

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/30/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.8.11

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (6,160,840) in view of Yi (5,978,365).

As per claims 11, 15 and 17, Park discloses an apparatus for puncturing and recovering code in spread spectrum communication system, comprising:

An interleaver that performs interleaving interleaving data;

A rate matcher that perform adjustment of data length by increasing (repeating) or decreasing (puncturing) the bits of data; and

A transmitter that transmits the data length adjusted data adjusted by the rate matcher. (See col. 3, line 64 to col. 4, line 18 and col. 8, lines 45-51).

Park does not disclose the rate matcher (repeater or puncture) that adjust data length from the interleaved data. However, Yi discloses puncturer for puncturing data from the interleaver. (See col. 24, lines 30-52 and also see Park's col. 6, lines 20-22). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to incorporate the puncturer (rate matching) of Yi into the invention of Park to puncture interleaved data so that error rate can be reduced.

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As per claim 12, the teaching of Park and Yi have been discussed above. Yi further discloses a coder for performing error correction coding. (Col. 6, lines 29-32).

As per claims 13, 14, 16 and 18, the teaching of Park and Yi have been discussed above. Park further discloses a deinterleaver for performing deinterleaving of the data length adjusted data provided by the rate matcher. (Col. 8, line 59).

As per claim 19, this claim is also rejected under the same rationale as set forth in claim 11.

As per claim 20, this claim is also rejected under the same rationale as set forth in claim 14.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung M. Chung whose telephone number is 703-305-9686. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHUNG M. CHUNG
PRIMARY EXAMINER